### 10/566843

### IAP9 Rec'd PCT/PTO 02 FEB 2006

PATENT APPLICATION

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Susumu NODA et al.

Application No.: New U.S. National Stage of

PCT/JP2004/012114

Filed: February 2, 2006 Docket No.: 125714

For: TWO-DIMENSIONAL PHOTONIC CRYSTAL MULTIPLEXER/DEMULTIPLEXER

#### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- 2. Relevance of one or more non-English language reference is discussed in the present specification. See References <u>6 & 17</u>.
- 3. One or more reference cited herein was cited in the International Search Report. An English language version of the International Search Report is attached for the Examiner's information. See References 1-5 & 8-16.
- 4. In accordance with 37 CFR §1.98(a)(2)(ii), copies of any U.S. patents and patent application publications are not attached.
- 5. An English language Abstract of one or more non-English language reference is attached hereto. See References 3 & 5-7.

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6. A computer-generated English language translation of one or more Japanese Patent Publication cited herein has been obtained from the website of the Japanese Patent Office ([http://www.jpo.go.jp]), and is attached, but has not been reviewed for accuracy. See References 6 & 7.

Respectfully submitted,

James A. Olifi Registration No. 27,075

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JAO:JSA/crh

Date: February 2, 2006

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INFORMATION DISCLOSURE STATEMENT							Stage of PCT/JP200	4/012114
(Use several sheets if necessary)				APPLICANTS Susumu NODA et al.				
				FILING DATE February 2, 2006				
U.S. PATENT DOCUMENTS								
Examiner Initials	Cite No.	Document Number	Date		Name			
	1	US 2002/0191905 A1	12/19/2002		PRATHER et al.			
FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Document Number	Date		Country		With English Abstract	With English Translation
	2	WO 98/57207	12/17/1998		WIPO			
	3	WO 2004/068205 A1	08/12/2004		WIPO		х	
	4	WO 01/20379 A1	03/22/2001		WIPO			
	5	JP A 62-100706	05/11/1987		JAPAN		х	
	6	JP A 2001-272555	10/05/2001		JAPAN		x	х
	7	JP A 2001-228347	08/24/2001		JAPAN		x	х
OTHER DOCUMENTS								
Examiner Initials	Cite No.	(Including Author, Title, Date, Pertinent Pages, etc.)						
	8	Yoshimasu SUGIMOTO et al; 29a-YN-5; "Design and characteriziation of coupling-controlled directional coupler (CC-DC)						
		Based on photonic-crystal FESTA"; March 2003; p. 1137						
9 Yoshihiro AKAHANE et al; "Design of a channel drop filter by using a donor-type ca						ty with high-quality factor in a two-		
<u> </u>		dimensional photonic crystal slab"; Applied Physics Letters; Volume 82, Number 9; March 3, 2003; pp. 1341-1343						
	Bong-Shik SONG et al; "Photonic Devices Based on In-Plane Hetero Photonic Crystals"; Science; Vol. 300; June 6, 20							2003;
		p. 1537, right column, lines 1-9, Fig. 1						
	11	B.S. SONG et al; 29a-YN-4; "Improvement of Optical Add/Drop Filtering efficiency by using an In-Plane Hetero structure						
		Interface"; March 2003; p. 1137						
	12	AKAHANE et al; 29a-YN-9; "Drastic Increase of Quality Factor of Defect-Cavities in 2D Photonic Crystal Slabs by Modifying Defect						
		Structure"; March 2003; p. 1138						
	AKAHANE et al; 1p-ZM-3; "Optical Add/Drop Devices Using 2D Photonic Crystal - Design of device structures to achieve flat-top transfer function in filtering responses"; 2003; p. 944							
EXAMINER						DATE CONSIDERED		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Date: February 2, 2006

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2 of 2 Form PTO-1449 ATTY DOCKET NO. US Dept. of Commerce APPLICATION NO. (REV. 1/06) PATENT & TRADEMARK OFFICE 125714 New U.S. National Stage of INFORMATION DISCLOSURE STATEMENT PCT/JP2004/012114 (Use several sheets if necessary) **APPLICANTS** Susumu NODA et al. FILING DATE February 2, 2006 U.S. PATENT DOCUMENTS Examiner Cite Initials No. Document Number Date FOREIGN PATENT DOCUMENTS Examiner Cite With With Initials No. Document Number Date Country English English Abstract Translation OTHER DOCUMENTS Examiner Cite (Including Author, Title, Date, Pertinent Pages, etc.) Initials No. 14 Y. SUGIMOTO et al; "Design, fabrication, and characterization of coupling-strength-controlled directional coupler based on two-Dimensional photonic-crystal slab waveguides"; Applied Physics Letters; October 20, 2003; Volume 83, Number 16; pp. 3236-15 Y. AKAHANE et al; "High-Q photonic nanocavity in a two-dimensional photonic crystal"; Nature Publishing Group; October 30, 2003; Vol. 425; pp. 944-947 16 B.E. LITTLE et al; "Microring Resonator Channel Dropping Filters"; Journal of Lightwave Technology, Vol. 15, No. 6, June 1997; pp. 998-1005 17 S. FAN et al; "Channel Drop Tunneling through Localized States"; Physical Review Letters; The American Physical Society; February 2, 1998; Volume 80, Number 5; pp. 960-963 18 M.J. KHAN et al; "Mode-Coupling Analysis of Multipole Symmetric Resonant Add/Drop Filters"; IEEE Journal of Quantum Electronics; October 1999; Vol. 35; No. 10; pp. 1451-1460 **EXAMINER** DATE CONSIDERED

Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance

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